

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the subject application.

Listing of Claims:

What is claimed is:

1. (currently amended): A power supply topology comprising:
 - a first path configured to be coupled to a controllable DC power source;
 - a second path configured to be coupled to a rechargeable battery;
 - a third path configured to be coupled to a system load, wherein said first, second, and third paths are coupled to a common node;
 - a unidirectional switch coupled to said first path to allow selective coupling of said controllable DC power source to said system load via said common node; ~~and~~
 - a selectively unidirectional switch coupled to said second path to allow selective coupling of said battery to said common node; and
 - a power management control circuit configured to monitor the voltage of said battery and control the output voltage of said controllable DC power source to be within a selected tolerance range of said voltage of said battery; said power management control circuit is further configured to control the conduction state of said unidirectional switch to a closed position to enable said controllable DC power source to supply power to said system load via said common node, said power management control circuit is further configured to control the conduction state of said selectively unidirectional switch to a first closed position to enable said rechargeable battery to supply power to said system load via said common node and to prevent a current flow from said controllable DC power source to said rechargeable battery;
- wherein when said unidirectional switch is in said closed position and said selectively unidirectional switch is in said first closed position, said controllable DC power source and said rechargeable battery are coupled in parallel with said system load in a parallel power supply mode to permit both said controllable DC power source and said rechargeable battery to concurrently supply power to said system load.

2 - 6 (cancelled)

7. (previously presented): The power supply topology of claim 1, wherein said controllable DC power source comprises a DC to DC converter.

8. (original): The power supply topology of claim 7, further comprising a fixed DC power source coupled to said DC to DC converter via said first path, wherein a first power conversion is made by said fixed DC power source by accepting an input voltage and converting said input voltage to a fixed DC output voltage and a second power conversion is made by said DC to DC converter by accepting said fixed DC output voltage and converting said fixed DC output voltage to a DC output voltage.

9. (previously presented): The power supply topology of claim 8, wherein said unidirectional switch is coupled between said fixed DC power source and said DC to DC converter.

10. (previously presented): The power supply topology of claim 8, wherein said unidirectional switch is coupled between said DC to DC converter and said common node.

11. (previously presented): The power supply topology of claim 1, wherein said controllable DC power source comprises a controllable adapter.

12. (previously presented): The power supply topology of claim 11, wherein a first power conversion is made by said controllable adapter by accepting an input voltage and converting said input voltage to an output DC voltage to supply to said system load.

13. (previously presented): The power supply topology of claim 11, wherein said controllable adapter comprises an AC/DC adapter.

Amendment E and REQUEST FOR CONTINUED EXAMINATION

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Page 4
O2M03.18

14-38 (cancelled)